

Applicant Copy

05/03/2004 SHEET 1 OF 4

FORM PTO-1449 U.S. Department of Commerce
(Rev. 4/92) Patent and Trademark OfficeINFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO.

0203.00

SERIAL NO.

09/915,840

APPLICANT

Alfred M. Handler

FILING DATE

07/27/01

GROUP

1636

11000 U.S. P.
09/915840
107/27/01

U.S. PATENT DOCUMENTS

EXAMINE R INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLAS S	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLAS S	TRANSLATION
					YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

ADD	O'Brochta et al., "Transposable Elements and Gene Transformation in Non-Drosophilid Insects", <u>Insect Biochemistry Molecular Biology</u> , Vol. 26(8-9), pp. 739-753, 1996.
	Lis et al., "New Heat Shock Puffs and β -Galactosidase Activity Resulting from Transformation of <i>Drosophila</i> with an <i>hsp70-lacZ</i> Hybrid Gene", <u>Cell</u> , Vol. 35, pp. 403-410, 1983(Part 1).
	Lohe et al., "Germline Transformation of <i>Drosophila virilis</i> with the Transposable Element <i>mariner</i> ", <u>Genetics</u> , Vol. 143, pp. 365-374, 1996.
	Loukeris et al., "Gene Transfer into the Medfly, <i>Ceratitis capitata</i> with a <i>Drosophila hydei</i> Transposable Element", <u>Science</u> , Vol. 270, pp. 2002-2005, 1995.
	Lozovskaya et al., "Germline Transformation of <i>Drosophila virilis</i> Mediated by the Transposable Element <i>hobo</i> ", <u>Genetics</u> , Vol. 142, pp. 173-177, 1996.
	O'Brochta et al., "Hermes, a Functional Non-Drosophilid Insect Gene Vector From <i>Musca domestica</i> ", <u>Genetics</u> , Vol. 142, pp. 907-914, 1996.
	Pirrotta et al., "Multiple upstream regulatory elements control the expression of the <i>Drosophila white</i> gene", <u>EMBO Journal</u> , Vol. 4(13A), pp. 3501-3508, 1985.
ADD	Ashburner et al., "Prospects for the genetic transformation of arthropods", <u>Insect Molecular Biology</u> , Vol 7(3), pp. 201-213, 1998.

AA2

		Bhadra et al., "Interactions Among Dosage-Dependent Trans-Acting Modifiers of Gene Expression and Position-Effect Variegation in <i>Drosophila</i> ", <u>Genetics</u> , Vol. 150, pp. 251-263, 1998.
		Coates et al., "Mariner transposition and transformation of the yellow fever mosquito, <i>Aedes aegypti</i> ", <u>Genetics</u> , Vol. 95, pp. 3748-3751, 1998.
		Chalfie et al., "Green Fluorescent Protein as a Marker for Gene Expression", <u>Science</u> , Vol. 63, pp. 802-805, 1994.
		Cormack et al., "ACS-optimized mutants of the green fluorescent protein(GFP)", <u>Science</u> , Vol. 173, pp. 33-38, 1996.
		Davis et al., "A Nuclear GFP that Marks Nuclei in Living <i>Drosophila</i> Embryos; Maternal Supply Overcomes a Delay in the Appearance of Zygotic Fluorescence", <u>Developmental Biology</u> , Vol. 170, pp. 726-729, 1995.
		Elick et al., "PCR analysis of insertion site specificity, transcription, and structural uniformity of the Lepidopteran transposable element IFP2 in the TN-368 cell genome", <u>Genetica</u> , Vol. 97, pp. 127-139, 1996.
		Franz et al., "Mobile Minos elements from <i>Drosophila hydei</i> encode a two-exon transposase with similarity to the paired DNA-binding domain", <u>Proc. Natl. Acad. Science</u> , Vol. 91, pp. 4746-4750, 1994.
		Gomez et al., "A <i>Drosophila melanogaster</i> hobo-white ⁺ vector mediates low frequency gene transfer in <i>D. virilis</i> with full interspecific white ⁺ complementation", <u>Insect Molecular Biology</u> , Vol. 6(2), pp. 165-171, 1997.
		Hazlrigg et al., "Transformation of white Locus DNA in <i>Drosophila</i> : Dosage Compensation, zeste Interaction, and Position Effects", <u>Cell</u> , Vol. 36, pp. 469-481, 1984.
		Jacobson et al., "Molecular structure of a somatically unstable transposable element in <i>Drosophila</i> ", <u>Proc. Natl. Acad. Science</u> , Vol. 83, pp. 8684-8688, 1986.
		Jasinskiene et al., "Stable transformation of the yellow fever mosquito, <i>Aedes aegypti</i> , with the Hermes element from the housefly", <u>Genetics</u> , pp. 3743-3747, 1998.
		Lanford et al., "Induction of Nuclear Transport with a Synthetic Peptide Homologous to the SV40 Antigen Transport Signal", <u>Cell</u> , Vol. 46, pp. 575-582, 1986.
		Lee et al., "Structure and Expression of Ubiquitin Genes of <i>Drosophila melanogaster</i> ", <u>Molecular and Cellular Biology</u> , Vol. 8(11), pp. 4727-4735, 1988.
↓	AA2	Lidholm et al., "The Transposable Element mariner Mediates Germline Transformation in <i>Drosophila melanogaster</i> ", <u>Genetics</u> , Vol. 134, pp. 859-868, 1993.

AA2	Franz et al., "Minos, a new transposable element from <i>Drosophila hydei</i> , is a member of the Tc1-like family of transposons", <u>Nucleic Acids Research</u> , Vol. 19(23), p. 646, 1991.
	Prasher et al., "Primary structure of the <i>Aequorea victoria</i> green-fluorescent protein", <u>Gene</u> , Vol. 111, pp. 229-233, 1992.
	Rubin et al., "Genetic Transformation of <i>Drosophila</i> with Transposable Element Vectors", <u>Science</u> , Vol. 218, pp. 348-353, 1982.
	Smith et al., " <i>hobo</i> Enhancer Trapping Mutagenesis in <i>Drosophila</i> Reveals an Insertion Specificity Different from <i>P</i> Elements", <u>Genetics</u> , Vol. 135, pp. 1063-1076, 1993.
	Wang et al., "Implications for <i>bcd</i> mRNA localization from spatial distribution of <i>exu</i> protein in <i>Drosophila</i> oogenesis", <u>Nature</u> , Vol. 369, pp. 400-403, 1994.
	Warren et al., "The <i>Hermes</i> transposable element from the house fly, <i>Musca domestica</i> , is a short inverted repeat-type element of the <i>hobo</i> , <i>Ac</i> , and <i>Tam3(hAT)</i> element family", pp. 87-97, 1994.
	Ahmed et al., "Use of ordered deletions in genome sequencing", <u>Gene</u> , Vol. 197, pp. 367-373, 1997.
	Cary et al., "Transposon Mutagenesis of Baculoviruses: Analysis of <i>Trichoplusia ni</i> Transposon IFP2 Insertions within the FP-Locus of Nuclear Polyhedrosis Viruses", <u>Virology</u> , Vol. 172, pp. 156-169, 1989.
	Yang et al., "Optimized codon usage and chromophore mutations provide enhanced sensitivity with the green fluorescent protein", <u>Nucleic Acids Research</u> , Vol. 24(22), pp. 4592-4593, 1996.
	Handler et al., "The lepidopteran transposon vector, <i>piggyBac</i> , mediates germ-line transformation in the Mediterranean fruit fly", <u>Proc. Natl. Acad. Science USA</u> , Vol. 95, pp. 7520-7525, 1998.
	Handler, A.M., et al., "Germline Transformation of <i>Drosophila melanogaster</i> with the <i>PiggyBac</i> Transposon Vector", <u>Insect Molecular Biology</u> , Vol. 8, (4), pp. 449-457, 1999.
	Handler, A.M., et al., "The <i>PiggyBac</i> Transposon Mediates Germ-line Transformation in the Oriental Fruit Fly and Closely Related Elements Exist in its Genome", <u>Insect Molecular Biology</u> , Vol. 9, (6), pp. 605-612, 2000.
AA2	Handler, A., et al., "Transformation of the Caribbean Fruit Fly, <i>Anastrepha suspensa</i> , with a <i>PiggyBac</i> Vector Marked with Polyubiquitin-regulated GFP", <u>Insect Biochemistry and Mol. Biology</u> , Vol. 31, pp. 199-205, 2001.

Duplicate Reference AA2

ADD	Handler, A., et al., "Polyubiquitin-Regulated DsRed Marker for Transgenic Insects", <u>Biotechniques</u> , Vol. 31, (3), pp. 2-6, 2001.
ADD	Handler, A., "A Current Perspective on Insect Gene Transformation", <u>Insect Biochemistry and Molecular Biology</u> , Vol. 31, pp. 111-128, 2001.
ADD	U.S. Utility Patent Application: Serial Number 09/377,066, Filing Date- August 19, 1999, Title- "PiggyBac Transformation System", Inventor(s)- Alfred M. Handler, Atty. Docket Number- 0194.98. <i>* Not for Publication</i>

EXAMINER

Ronald A. Hupp, Jr.

DATE CONSIDERED

5/3/2004

EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(Form PTO-1449 [6-4])